

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application.

LISTING OF CLAIMS

1-19 (Canceled)

20. (Currently Amended) An optical communication apparatus comprising:
a communication processing unit;
an optical device connected to said communication processing unit; and
an optical fiber optically coupled to said optical device, and
a lead frame electrically coupled to said optical device,
wherein said optical device and said optical fiber are mounted on a ~~non-metal~~ Si
substrate, and transparent resin is filled between a face of said optical device that is optically
coupled to said optical fiber, and an end of said optical fiber that is optically coupled to said
optical device, and
said transparent resin is silicone resin wherein said optical device is one selected from
a group of a semiconductor optical device and a photo-electric conversion device, and
said transparent resin is one selected from a group of a silicone resin and a silicone
gel, and is transparent in wavelength band width of said semiconductor optical device and
said photo-electric conversion device, and
a refractive index of said transparent resin is substantially equal to a refractive index
of said optical fiber.

21. (Previously Presented) An optical communication apparatus according to claim
20, wherein a refractive index of said transparent resin matches that of said optical fiber.

22. (Previously Presented) An optical communication apparatus according to claim
20, wherein said transparent resin is in gel form.

23. (Previously Presented) An optical communication apparatus according to claim 20, wherein said optical device, said end of the optical fiber optically coupled to said optical device, and said substrate are placed inside a resin casing.

24. (Previously Presented) An optical communication apparatus according to claim 23, wherein said optical device, said end of the optical fiber optically coupled to said optical device, and said substrate are placed in a cavity inside said resin casing.

25. (Previously Presented) An optical module comprising:
an optical device;
an optical fiber optically coupled to said optical device at one end;
a lead frame electrically coupled to said optical device,
a non-metal substrate on which said optical device and said end of the optical fiber are mounted,
wherein transparent resin is filled between a face of said optical device that is optically coupled to said optical fiber, and said end of the optical fiber, and
said transparent resin is silicone resin.

26. (Previously Presented) An optical module according to claim 25, wherein a refractive index of said transparent resin matches that of said optical fiber.

27. (Previously Presented) An optical module according to claim 25, wherein said transparent resin is in gel form.

28. (Previously Presented) An optical module according to claim 25, wherein said optical device, said end of the optical fiber and said substrate are placed inside a resin casing.

29. (Previously Presented) An optical module according to claim 28, wherein said optical device, said end of the optical fiber and said substrate are placed in a cavity inside said resin casing.
30. (Previously Presented) An optical communication apparatus according to claim 23, wherein said resin casing is formed by transfer molding.
31. (Previously Presented) An optical module according to claim 28, wherein said resin casing is formed by transfer molding.
32. (Previously Presented) An optical communication apparatus according to claim 20, wherein said substrate is a silicon substrate.
33. (Previously Presented) An optical module according to claim 25, wherein said substrate is a silicon substrate.